

IN THE CLAIMS

Please cancel claims 13 and 15 without prejudice.

CLEAN COPY OF AMENDED CLAIMS:

1. (Amended) A method for creating a partition in a storage device, the method comprising:

limiting a size of the partition to be created to m to n -th power, wherein m and n are natural numbers; and

disposing the partition to be created at a position in the storage device that is aligned with the size of the partition.

2. (Amended) A method for creating a partition in a storage device, the method comprising:

receiving a request to create a partition having a requested size of m to n -th power, where m and n are natural numbers,

referring to a table containing disposition information of partitions in the storage device,

determining whether there is an empty region in the storage device having a size equal to the requested size based on the disposition information and, if so, disposing the partition in that empty region,

determining, based on the disposition information, whether there is an empty region having a size mk times as large as the requested size (where k is a natural number) when an empty region having the requested size does not exist, and, if so, successively dividing that empty region by m until the size of the divided empty region becomes equal to the requested size, and disposing the partition in the divided region of the storage device, and

disposing the partition in a region where a partition can be created, the region being a position that can be aligned with the requested size when there is neither a region having the requested size nor a region having mk times the requested size.

3. (Amended) The method according to claim 2, wherein the step of receiving the request to create a partition includes

receiving a request to create a partition of an arbitrary size, and adopting, as the requested size, a size of m to the n -th power, where n is at a minimum that meets the size of the received request.

4. (Amended) A method of deleting a partition in a storage device that has a size of m to n -th power, where m and n are natural numbers, the method comprising:

receiving information specifying a partition to be deleted; and

referring to a table containing disposition information concerning the partition in the storage device, and

determining whether a region before or after the partition to be deleted is an empty region, and whether a region obtained by combining the empty region and the partition to be deleted can be aligned with a total size of the empty region and the partition to be deleted, and, if so, combining the empty region and a region having the partition deleted therefrom.

5. (Amended) A storage medium containing a computer program for causing a computer to execute actions comprising:

receiving a request to create a partition having a size of m to n -th power, where m and n are natural numbers; and

creating the partition in a region on a storage device, the region being in a position that is aligned with the received size.

6. (Amended) A storage medium containing a computer program for causing a computer to execute actions comprising:

receiving a request to create a partition having a requested size of m to n -th power, where m and n are natural numbers; and

referring to a table containing disposition information concerning a partition in a storage device,

determining whether there is an empty region in the storage device having a size equal to the requested size based on the disposition information and, if so, disposing the partition in that empty region,

determining, based on the disposition information, whether there is an empty region having a size mk times as large as the requested size (where k is a natural number) when an empty region having the requested size does not exist, and, if so, successively dividing that empty region by m until the size of the divided empty region becomes equal to the requested size, and disposing the partition in the divided region of the storage device, and

disposing the partition in a region where a partition can be created, the region being a position aligned with the requested size when there is neither a region having the requested size nor a region having mk times the requested size.

7. (Amended) The storage medium according to claim 6, wherein the step of receiving the request to create a partition includes receiving a request to create a partition of an arbitrary size, and adopting, as the requested size, a size of m to the n -th power, where n is at a minimum that meets the size of the received request.

8. (Amended) A storage medium containing a computer program for causing a computer to execute a process of deleting a partition that is in a storage device and that has a size of m to n -th power, where m and n are natural numbers, the process including:

receiving information specifying a partition to be deleted;
and

referring to a table containing disposition information concerning the partition in the storage device, and

determining whether a region before or after the partition to be deleted is an empty region, and whether a region obtained by combining the empty region and the partition to be deleted can be aligned with a total size of the empty region and the partition to be deleted, and, if so, combining the empty region and the region having the partition deleted therefrom.

9. (Amended) An information processing apparatus, comprising:

means for receiving a request to create a partition having a size of m to n -th power, where m and n are natural numbers; and

means for creating the partition in a region on a storage device, the region being in a position that is aligned with the received size.

10. (Amended) An information processing apparatus, comprising:

means for receiving a request to create a partition having a requested size of m to n -th power, where m and n are natural numbers; and

means for referring to a table containing disposition information concerning partitions in a storage device, for determining whether there is an empty region in the storage device having a size equal to the requested size, and for disposing the partition in that empty region,

means for determining, based on the disposition information, whether there is an empty region having a size mk times as large as the requested size (where k is a natural number) when an empty region having the requested size does not exist, and if so, for successively dividing that empty region by m until the size of the divided empty region becomes equal to the requested size, and for disposing the partition in the divided region of the storage device, and

means for disposing the partition in a region where a partition can be created, the region being a position aligned with the requested size, when there is neither a region having the requested size nor a region having mk times as large as the requested size.

11. (Amended) The information processing apparatus according to claim 10, wherein said means for receiving a request is operable to receive a request to create a partition of an arbitrary size, and to adopt, as the requested size, a size of m

to the n -th power, where n is at a minimum that meets the size of the received request.

12. (Amended) An information processing apparatus for deleting a partition in a storage device and that has a size of m to n -th power, where m and n are natural numbers, the apparatus comprising:

means for receiving information for specifying a partition to be deleted; and

means for referring to a table containing disposition information concerning the partition in the storage device, and when a region before or after the partition to be deleted is an empty region, and if a region obtained by combining the empty region and the partition to be deleted is aligned with a total size of the empty region and the partition to be deleted, for combining the empty region and the region having the partition deleted therefrom.

14. (Amended) A storage device comprising:

a plurality of created partitions, and
a management region which manages a size and position of each created partition, wherein the management region includes size information and position information therein, the size information indicates that each created partition has a size of m to the n -th power, m and n are natural numbers, and the position information indicates that each created partition is disposed at a position aligned with the size of the partition.

16. (Amended) A method comprising recording data on a storage device, wherein the data manages a size and position of created partitions on the storage device, the data includes size information and position information, the size information indicates that each created partition has a size of m to n -th power, m and n are natural numbers, and the position information indicates that each created partition is disposed at a position aligned with the size of the partition.

Insert new claims 17-19 as follows:

17. (New) A storage device having a partition that is created according to a method comprising:

limiting a size of the partition to be created to m to n -th power, wherein m and n are natural numbers; and

disposing the partition to be created at a position in the storage device that is aligned with the size of the partition.

18. (New) A storage device having a partition that is created according to a method comprising:

receiving a request to create a partition having a requested size of m to n -th power, where m and n are natural numbers,

referring to a table containing disposition information of partitions in the storage device,

determining whether there is an empty region in the storage device having a size equal to the requested size based on the disposition information and, if so, disposing the partition in that empty region,

determining, based on the disposition information, whether there is an empty region having a size mk times as large as the requested size (where k is a natural number) when an empty region having the requested size does not exist, and, if so, successively dividing that empty region by m until the size of the divided empty region becomes equal to the requested size, and disposing the partition in the divided region of the storage device, and

disposing the partition in a region where a partition can be created, the region being a position that can be aligned with the requested size when there is neither a region having the requested size nor a region having mk times the requested size.

19. (New) The storage device of claim 18, wherein the step of receiving the request to create a partition includes receiving a request to create a partition of an arbitrary size, and adopting, as the requested size, a size of m to the n -th

Application No. 10/033,157

power, where n is at a minimum that meets the size of the received request.